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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,267	12/02/2003	Edmund Schuller	S&S-1202A	3358
22827 7590 01/04/2010 DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			EXAMINER LANGDON, EVAN H	
			ART UNIT 3654	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/726,267

Applicant(s)

SCHULLER ET AL.

Examiner

EVAN H. LANGDON

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25, 26, 30-32, 36, 38-40 and 47-66 is/are pending in the application.
- 4a) Of the above claim(s) 25, 26, 31, 32, 36, 47 and 48 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38-40 is/are allowed.
- 6) ☒ Claim(s) 49-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 22 December 2009 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 49-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claims 49 and 60, it is unclear if "A friction ring" as recited on line 1 of claims 49 and 60, respectively, is the same or different from the "belt" as recited on lines 7 and 4 of claims 49 and 60, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 49- 54, 56, 57 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 1,554,253) in view of Labesky (US 5,833,776).

Smith disclose a friction ring for friction driving a roll; a friction roll 16 defining axial and radial directions, the friction roll comprising at least one rotatable roll body 16 for driving the spool, the at least one rotatable roll body 16 having a body width along the axial direction and having at least two portions, one portion with a radius of r_1 and another portion with a radius of r_2 , wherein the radius r_1 is less than the radius r_2 (see annotated Fig 6 below), the friction ring comprising:

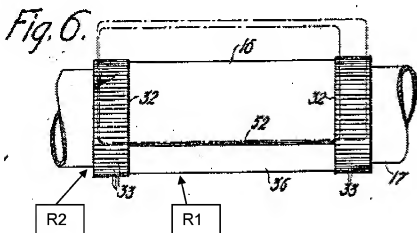
a belt 32 having a belt width that is less than the body width of the at least one rotatable body; the belt being positioned upon the portion of the rotatable roll body having a radius of r_1 .

Smith fails to show the belt 32 removable by having two open ends bound together by a fastening apparatus.

Labesky teaches a flexible ring 10 with ring fastening means in general having two open ends bound together by a fastening apparatus 24, 26. The recitation with respect to the manner in which a claimed apparatus is intended to be employed does

not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ 2d 1647 (1987).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the friction belt of Smith to include a fastening means general having two open ends bound together by a fastening apparatus as suggested by Labesky, to more easily remove the friction belt of Smith.



In regard to claims 50 and 51, Smith as modified by Labesky teaches the fastening apparatus comprises two connectors 24, 26, whereby one of the connectors is secured to each of the connectors is secured to each of the open ends of the friction ring, where the connectors include hooks (Labesky Fig. 1 and 2) that connect by radial movement relative to each of the ends.

In regard to claims 53-54, Smith as modified by Labesky teaches an auxiliary fastener 31 (Smith).

In regards to claims 57, Smith as modified by Labesky teaches the ends of the friction ring are joined by an adhesive (Labesky, col. 9 lines 11-19). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify the fastening ends of Smith as modified by Labesky to include an adhesive joining the interlocking elements as suggested by Labesky, to secure the engagement of the interlocking elements.

In regard to claim 59, Smith as modified by Labesky teaches a plurality of grooves 33 oriented perpendicular to the length of the belt.

Claims 55 and 58 rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Labesky as applied to claim 49 above, and further in view of Burke et al. (US 5,507,226).

Burke teaches a friction roll having a friction ring 14 constructed from elastic material (col. 3 ll. 64 to col. 4 ll. 62, Burke). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the belt of Smith in view of Labesky to include an elastic material as suggested by Burke to increase the coefficient of friction, since combining prior art elements according to known methods will yield predictable results.

Claims 60, 63 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al (US 5,507,226) in view of Labesky (US 5,833,776).

Burke discloses an apparatus for friction driving a spool, the apparatus comprising a friction roll having at least one rotatable roll body 12 disposed thereon; and

a friction ring 14 carried on the rotatable roll body, the friction ring comprising a belt that is removable and constructed from an elastic strip of flexible material(col. 3 ll. 64 to col. 4 ll. 62, Burke)

Burke fails to show the friction ring 14 removable by having two open ends bound together by a fastening apparatus.

Labesky teaches a ring 10 with ring fastening means in general having two open ends bound together by a fastening apparatus 24, 26, the two ends connected or separated from each other by displacement of the one end relative to the other along a radial direction of the roll body. The recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte masham*, 2 USPQ 2d 1647 (1987).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the friction ring of Burke to include a fastening means general having two open ends bound together by a fastening apparatus as suggested by Labesky, to more easily remove the friction ring of Burke.

In regard to claim 63, the limitation that the cross-section is about constant when subject to a tensile force equal to that of installation on the roll body and where the ring exhibits a width that diminishes with increasing distance from the ends of the friction ring when no tensile force is acting on the friction ring are properties that are inherent to an elastic material that is ring shaped and subject to a tensile force.

In regard to claim 66, Burke as modified by Labesky teaches the fastening apparatus comprises two connectors 24, 26, whereby one of the connectors is secured to each of the connectors is secured to each of the open ends of the friction ring, where the connectors include hooks (Labesky Fig. 1 and 2) that connect by radial movement relative to each of the ends.

Claims 61 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke in view of Labesky as applied to claim 60 above, and further in view of Smith.

Smith teaches the axial position of said at least one belt along the rotatable roll body is maintained by differences in the radius of the rotatable roll body and a plurality of grooves 33 oriented perpendicular to the length of the belt.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the roll body of Burke in view of Labesky to include different radii to hold the belt in its axial position and to have a plurality of grooves for gripping as suggested by Smith, since all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Allowable Subject Matter

Claims 38-40 are allowed.

Claims 62 and 64 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EVAN H. LANGDON whose telephone number is 571-272-7057. The examiner can normally be reached on Monday through Friday, 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen can be reached on 571-272-6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/EVAN H LANGDON/
Primary Examiner, Art Unit 3654